

NEW CULICIDÆ FROM THE FEDERATED MALAY STATES.

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(Continued from p. 15.)

MEGARININA.

Genus TOXORHYNCHITES, Theob. (Mono. Culicid. i. p. 244, 1901).

TOXORHYNCHITES LEICESTERI, n. sp.

Thorax with metallic green scales, an azure spot over the wings. Abdomen purple, banded with pale blue. Legs unbanded in the male, banded with white in the female; last two tarsi white.

♀. Head black, covered with broad flat scales; along the orbital margin is a narrow band of scales broadening out laterally, which are peacock-blue, in some lights they show purple; the rest of the upper surface of the head is clothed with metallic golden scales. Immediately around the nape are a few upright forked scales, dark golden in colour; on the vertex are four golden-brown bristles. Eyes black. Antennæ with basal joints black, frosted, naked; remaining joints black at the nodes, brown at the internodes; verticillate hairs black. Palpi three-jointed, very short, not more than one-sixth the length of the proboscis; first joint swollen at the base and constricted, the last joint small and nipple-like; scales broad, spatulate, under a hand lens dark brown, in stronger light rich blue, except at the tip, where the scales vary from rose-purple to a mauve according to the angle at which the light strikes them. Proboscis broad at the base, long and bent, covered with purple or rose-purple broad scales; at the angle the scales are golden green and some peacock blue mixed among them. Prothoracic lobes small, oval, rather prominent; thickly clad with scales which are purple-blue or rose-purple as the position to light is varied. Mesonotum black, densely covered with broadly spindle-shaped metallic green scales; over the bases of the wings the scales are larger, longer and spatulate-shaped. (In a fresh specimen the colouring is said to be like a green bottle-fly.) If the thorax is examined through a lens, the central part looks dark coppery brown to purple, while the sides, where the light strikes at an angle, show metallic green—in other lights the scales appear bluish green or dark coppery red; at the anterior margin of the mesonotum is a band of scales which appear violet, rose-purple or purple according to the light, and below this a triangular patch of silvery scales immediately behind the prothoracic lobes, and over the roots of the wings a patch of peacock-blue scales and a row of short stout black bristles. Scutellum densely clothed with broad, long flat scales, which on the lateral lobes are of peacock blue or metallic green according to the light, and on the central lobe of a dark green fringed with lighter green posteriorly. Scutella bristles short, dark brown. Metanotum dark brown. Wings brown in colour; the costa and first longitudinal vein clad with broad, flat scales, which are peacock blue, golden green, and purple according to the light; the position of the cross-veins, the

size of the fork-cells and the scaling of the other veins is that of a typical *Toxorhynchites*. Legs with the coxæ yellowish, mid and hind clad with creamy scales on their outer face; fore legs with the upper surface of the femora clad with rose-purple scales; at the extreme apex is a tuft of long spindle-shaped scales which are white or peacock blue; just behind these are black spines placed in a semicircle; the whole of the under surface is covered with bright golden scales; tibiæ entirely covered with purple scales; a short distance from the base on the metatarsus is a ring of creamy yellow scales; third and fourth tarsals mostly covered with creamy scales, the rest of the tarsus and metatarsus with purple scales; mid legs, femora and tibia as in the fore legs; the basal half of metatarsus with creamy scales, apical half purple scaled; all the tarsal joints creamy scaled. Hind legs golden at the base and on the under surface, purple above; scales at apex similar as in the other legs; tibia purple scaled; metatarsus purple scaled except for a broad ring of creamy scales a little beyond its base; first and second tarsal joints purple scaled; third and fourth creamy scaled; unguis equal and simple on all the legs. Pleuræ dark brown, for the most part covered with silvery grey scales. Abdomen with the dorsum of the first segment covered with peacock-blue scales, in some lights a dark green; the other segments covered with rose-purple scales, basal banding of peacock-blue scales. Venter bright golden except for a patch of dark scales on the fourth segment; the last segment fringed with pale golden hairs, no caudal tuft.

♂. Head with a deep depression in the middle line; the scaling is much as in the female. Antennæ banded brown and white; plumes black; basal joint black; second joint scaled with numerous broad golden scales; the two last joints dark and elongated. Palpi 3-jointed, the first joint with a swollen base, having the appearance of a joint constricted in the middle; the second scaled with golden scales except at the apex, where there is a narrow band of purple-blue scales; in the middle there is also a band of purple scales, and towards the base there are on the upper surface purple scales. Proboscis purple scaled, green scaled at the angle. Thorax as in the female. Legs with the coxæ and under sides of femora gold scaled; knee spots peacock blue, or creamy in some lights; the remaining parts of legs purple scaled; no banding. Unguis, fore and mid, unequal; the larger tooth uniserrate. Abdomen as in female. Length 10 mm.

Habitat.—Kuala Lumpur.

Observations.—Described from two perfect specimens sent by Dr. Leicester. The beautifully adorned abdomen, metallic green thorax, with azure wing root-spots, and the last two white hind tarsals of the female, are very characteristic.

TOXORHYNCHITES METALLICUS, n. sp. (Leicester.)

“Thorax brilliant metallic green; abdomen deep rose-purple, with basal creamy yellow bands, no caudal tuft. Legs in the male unbanded, in the female the mid legs have a basal creamy white band; fore and mid unbanded. Male palpi with the second and third joints mostly golden yellow.

“ ♀. Head black; a narrow band of creamy yellow scales along the orbital margin, which laterally broadens into a distinct patch; the rest of the upper surface of head is covered with broad flat scales which vary in colour. If looked at from behind, the central patch looks bronze-green and the scales at the sides blue-green. In one specimen the whole patch is a deep rich blue, while the marginal scales are silver. Immediately above the occipital foramen are a few fawn-coloured upright scales scarcely notched; a few small bristles are placed on the vertex which look black or purple or even golden brown according to the light. Antennæ with the basal joint black, with a silvery tomentum, naked save for a few short white hairs; the second joint scarcely swollen, light yellow in colour, with a few black spatulate scales on its upper face; the succeeding joints black with white pubescence; the verticillate hairs black. Clypeus black, with silvery sheen, notched on either side. Palpi short, not more than one-fifth the length of the proboscis, 4-jointed (?); last joint small and nipple-like. First two joints with golden scales at the sides and beneath; the two last joints are covered with scales which are coppery or rose-purple according to the angle the light strikes them. The proboscis is long, swollen at the base; the scales are purple or coppery. Prothoracic lobes small, thickly covered with broad, flat racquet-shaped scales of a creamy yellow colour, with some light brown bristles. Mesonotum black, thickly clad with spindle-shaped flat scales, which laterally become very broad and blunt-ended, and which in a good light appear of a brilliant metallic green to the naked eye in a fresh specimen. Under a lens the colour varies, peacock blue, bronzy purple and metallic green appearing intermixed, now one colour predominating, now another, as the fly is shifted to different angles. On the anterior margin are some golden scales and numerous golden bristles, and laterally in front, immediately behind the prothoracic lobes, there is a band of metallic rose-purple scales, and beneath this is a triangular patch of creamy yellow scales. The two patches meet in a straight line, but the external edges are convex; hence with the prothoracic lobe they form a rough ellipse. The upper band is to be seen when looking down upon the mesonotum, and is very ornamental. The scutellum is clad with rather long, flat spatulate scales, which are coppery, bronzy or purple-bronze as the direction of the light varies. There is a tuft of bristles over the root of each wing. Scutellar bristles are brown in colour. The pleuræ are a dark, glistening chestnut brown, naked in parts, scaled in other parts with creamy yellow scales. The wings are quite typical; the costa and first longitudinal vein are scaled with metallic rose-purple scales. Legs with the coxæ and femora light yellow; tibia and tarsi much darker; the coxæ, bases and under surface of femora clad with metallic golden scales; the upper and lateral surfaces of femora and the whole tibia and tarsi of fore leg covered with brilliant metallic scales, varying from coppery-bronze to rose-purple or bronze-purple; there are creamy scales at the apices of all the femora. Mid leg as the fore, except for a band of golden scales at the base of the metatarsus and golden scales covering the penultimate tarsal joint; tibia and tarsi of hind legs the same as the fore. Ungues equal and simple. Metanotum black. Halteres with pale yellow stems and dark scaled knobs.

Abdomen with the first segment scaled creamy yellow laterally, rose-purple centrally; the other segments brilliant rose-purple, with creamy yellow banding expanding laterally into triangular patches; venter scaled with metallic golden scales, except segment four, which has a patch of dark purple scales.

“♂. Head black, with a deep furrow in the centre; there is a large central patch of flat scales of a bronze green or golden green colour; the scales along the orbital margins are peacock blue, laterally there is a patch of scales peacock blue or rose-purple according to the light in which they are seen. Antennæ with the basal joint black, nude; remaining joints creamy, growing darker towards the apex; the second joint scaled with spatulate and elongated scales of a dark brown colour; a few scales show metallic colouring. There are numerous dark brown hairs on the joints; the verticillate hairs dark brown, almost black, neither very dense nor very long. The antennæ are not nearly so marked a feature as they are in a *Megarhinus*. Palpi, 3-jointed; first joint shows a slight swelling at the base, and there is a thinning of the chitin which looks like a joint but is not; there is also a second thinning, and the chitin is folded in more basally; the whole joint is very long. The second joint is about half the length of first; the third is long and pointed, almost as long as the first joint, which is almost entirely golden scaled except on its upper surface near its base, where there is a patch of rose-purple scales and a band of the same about its middle and a few dark scales dorsally at the apex; the second joint golden scaled beneath and also the sides, except apically; the upper surface is purple scaled; the third joint is entirely purple scaled. Proboscis scaled with purple scales to the angle, then green scaled. The markings of both proboscis and palpi vary. In one specimen I have the first joint of the palpus is entirely gold scaled save for a ring of purple scales on the middle and apex. The thorax is similar to the female. Legs with the coxæ and under sides of femora golden scaled. The upper surfaces of the femora and the rest of all the legs are clad with purple scales; a few pale scales are inserted at the apices of the femora; fore and mid unguis unequal, the larger uniserrate. Abdomen scaled as in the female. No caudal tuft. A few rather long golden hairs inserted on the two last segments.”—(Leicester). Length 10 mm., male and female.

Habitat.—Kuala Lumpur.

Observations.—This is a very distinct species. The most striking features are the honey yellow and purple male palpi and the single creamy band on the mid legs of the female. Had this species been described from the dried types sent me by Dr. Leicester, I should have described the abdomen as unbanded, for in the female it is evidently shrunken, and no trace of the bands seen in the fresh specimen can now be noticed.—(F. V. T.)

(To be continued.)
